State of California Business, Transportation and Housing Agency

Memorandum

To: Nick Burmas, HQ, Structures Hyd., MS 9
Brad Mettam, D-9, Transportation Planning
Linda Grimes, D-8, Transportation Planning, IGR/MS 726
Romy Balanza, D-8, Transportation Planning, IGR/MS 726

Date: July 9, 2001

File No: **#410**

Project Proponent: - **US DOE**

Caltrans Dist.: **9, 8, and Structures Hydraulics**

From: **DEPARTMENT OF TRANSPORTATION**
TRANSPORTATION PLANNING PROGRAM
P.O. Box 942874 (MS 32)
Sacramento, CA 94274-0001

Subject: **U.S. Department of Energy, Draft Supplemental EIS for Yucca Mountain Nuclear Repository**

Attached are copies of the Notice of Completion for this supplement and a response from the CA DOE. If you did not receive a copy of this draft supplement, please call me as soon as possible. Please review and return this sheet to me by **August 6, 2001** along with your comments.

Bill Costa
Department of Transportation
Transportation Planning Program MS-32
P. O. Box 942874
Sacramento, CA 94274-0001

If you have any questions, please call me at CALNET 8-453-9689 or (916) 653-9689. Comments can be faxed to CALNET 8-453-1447 or (916) 653-1447.

William J. Costa/Ron Helgeson
Headquarters IGR/CEQA Program
Transportation Planning Program

Date received in TPP: 7/2/01
Response due back to TPP: 8/6/01

Attachments

_____ NO COMMENT

_____ COMMENT ATTACHED

_____ NO JURISDICTION

Signature: _____ Dist./Progm.: _____

Date: _____

Form A: Notice of Completion

See NOTE below
SCH # 99084008

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

Project Title: Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel & High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada

Lead Agency: U.S. Department of Energy, Yucca Mountain — **Contact Person:** [illegible]

Street Address: Office of Civilian Radioactive Waste Management — **Phone:** [illegible]

City: P.O. Box 30307, North Las Vegas **Zip:** NV 89036-0307 **County:** Clark County, Nevada

MS 010

Project Location

County: Nye County, Nevada — **City/Nearest Community:**

Cross Streets: — **Zip Code:** — **Total Acres:**

Assessor's Parcel No.: — **Section:** — **Twp.:** — **Range:** — **Base:**

Within 2 Miles: State Hwy #: — **Waterways:**

Airports: — **Railways:** — **Schools:**

Document Type

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other

NEPA: ☐ NOI ☐ EA ☒ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other

RECEIVED
6/25/01
SM
STATE CLEARINGHOUSE

Local Action Type

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan

☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan

☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.)

☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other

Development Type

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational
☐ Recreational

☐ Water Facilities: Type MGD
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type Watts
☐ Waste Treatment: Type
☐ Hazardous Waste: Type
☒ Other: Geologic Repository

Project Issues Discussed in Document

☒ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☐ Coastal Zone
☐ Drainage/Absorption
☒ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☐ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☐ Soil Erosion/Compaction/Grading
☐ Solid Waste
☐ Toxic/Hazardous
☐ Traffic/Circulation
☒ Vegetation
☐ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Wildlife
☐ Growth Inducing
☒ Landuse
☒ Cumulative Effects
☐ Other

The purpose of this Supplement to the Draft EIS is to provide additional information on repository design enhancements and operating modes, and to provide additional assessments of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository at Yucca Mountain in Nye County, Nevada for the disposal of commercial and DOE spent nuclear fuel and high-level radioactive waste. The Supplement addresses only modifications to the repository design and operating modes from the Draft EIS. It does not address aspects of the Proposed Action that have not been modified.

State Clearinghouse Contact: Scott Morgan (916) 445-0613

State Review Began: 6-25-2001

Agency to SCH 8-11-2001

SCH COMPLIANCE 8-13-2001

Please note State Clearinghouse Number (SCH#) on all Comments

SCH#: 199084008

Please forward late comments directly to the Lead Agency

AQMD/APCD____

(Resources: ____/____)

Project Sent to the following State Agencies

- X Resources
- ____ Boating & Waterways
- ____ Coastal Comm
- ____ Colorado Rvr Bd
- ____ Conservation
- ____ Fish & Game # ____
- ____ Delta Protection Comm
- ____ Forestry & Fire Prot
- ____ Historic Preservation
- ____ Parks & Rec
- ____ Reclamation Board
- ____ Bay Cons & Dev Comm
- ____ DWR
- ____ OES (Emergency Svcs)

Bus Transp Hous

- ____ Aeronautics
- X CHP
- ____ Caltrans # ____
- X Trans Planning
- ____ Housing & Com Dev
- X Food & Agriculture
- X Health Services

State/Consumer Svcs

- ____ General Services

Cal EPA

- ____ ARB – Airport Projects
- ____ ARB – Transportation Projects
- ____ ARB – Major Industrial Projects
- ____ Integrated Waste Mgmt Bd
- ____ SWRCB: Clean Wtr Prog
- ____ SWRCB: Wtr Quality
- ____ SWRCB: Wtr Rights
- ____ Reg. WQCB #____
- X Toxic Sub Ctrl-CTC

Yth/Adlt Corrections

- ____ Corrections

Independent Comm

- ____ Energy Commission
- ____ NAHC
- ____ Public Utilities Comm
- ____ Santa Monica Mtns
- ____ State Lands Comm
- ____ Tahoe Rgl Plan Agency

____ Other: ____

Date: June 18. 2001
To: Yucca Mountain SEIS File
From: Halstead
Subject: Key Issues Related to DOE Proposal for Expanded Fuel Blending

1. Fuel Blending is not discussed in detail in either the DEIS (see Appendix E, Pp. 11-12) nor in the SEIS (p.2-15). The SEIS refers the reader to Section 2.2.2.1 of the Science and Engineering Report (DOE 2001a). The SEIS should contain a full description of the proposed fuel blending process. This could be a major NEPA compliance issue.

2. Fuel blending would be a very complex operation. The additional handling of highly radioactive SNF in the pool building will create additional opportunities for accidents such as dropping of assemblies due to grapple failure or operator error. Releases of radioactive materials from accidents may or may not be contained in the pool storage and blending area. The mixing of SNF assemblies of different sizes and different radiological characteristics, from different fuel batches and/or reactors, will create numerous opportunities for errors (eg, insertion of incorrect assembly in disposal canister, insertion of assembly in incorrect disposal canister cell, etc). Cleanup after accidents will likely increase worker exposures and generate additional streams of LLW, Mixed Wastes, and possibly HLW. Indeed, the very feasibility of large-scale fuel blending is questionable.

3. Large-scale, daily fuel blending at the surface facilities will be considerably more risky than the base case process described in the DEIS (see discussion of North Portal Operations Area, Pp. 2-16 to 2-20). The proposed capacity of 5,000 MTHM or 12,000 SNF assemblies would be 5 to 10 times larger than the pools currently in operation at U.S. civilian reactors. In addition to the potential for handling accidents, pool storage and blending operations would be vulnerable to a wide range of natural disasters (earthquakes), human initiated events (insider sabotage, terrorist attack), and "normal" accidents (pool contamination resulting from cladding deterioration or undetected cladding pin hole leaks, pool filtration pump failure, pool leakage, loss of electrical power, etc). This may also mean the public's perceived risk of repository preclosure operations will increase.

4. Fuel blending requirements for "hotter" SNF could result in more highly radioactive SNF being shipped to the repository during the first two decades of repository operations. The entire concept of geologic disposal as proposed in the 1980 Generic EIS was based on the concept of shipping "oldest fuel first." The proposal for fuel blending, coupled with the desire of many utilities to ship the "youngest" fuel out of their pools to a Federal facility at the earliest opportunity, could result in large amounts of 5-10 year cooled fuel being shipped to the repository from startup of operations. The DEIS transportation risk analysis assumes an average SNF "age" of 26 years. Shipment of "younger"SNF would result in considerably higher routine and accident radiological risks during handling, transport, and storage, increased risks which are not addressed in the SEIS.

5. Fuel blending requirements for "hotter" SNF could result in much greater reliance upon truck transportation for repository deliveries during the first two decades of repository operations.

Current rail transport casks are designed to ship fuel SNF older than 10 years. Truck casks can carry fuel as young as 5 years out of reactor. Moreover, if the goal is to maximize "flexibility of operations" at the fuel blending facility by maintaining a diverse inventory of SNF, reliance on truck transport would be further encouraged because of quicker loading, unloading, and overall turn-around times for truck casks. Finally, if the commitment to fuel blending eliminates the previous goal of delivering large, multiple-purpose canisters, sealed and ready for emplacement, then there may no longer be any economic advantage to shipping large canisters by rail, and truck transportation could become the predominant or even sole mode of SNF transport. The SEIS addresses none of these issues. The SEIS fails to address the implications of fuel blending for selection of the preferred mode of transportation or the resulting implications for the number of shipments, risks, and impacts.

Copies to: Strolin, NWPO
Dilger, Clark County
Resnikoff, RWMA